Serial No.: 09/956,332

Reply to Office Action of March 18, 2004

PATENT PD990017

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Previously presented) (Currently Amended) A method for assembling data packets for isochronous data transmission via a data bus, the <u>a</u> data format for the isochronous data transmission being defined in an isochronous data format header of the <u>a</u> bus packet, comprising the steps of:

writing the isochronous data format header to a special register and to a buffer memory for the data packets when the isochronous data transmission is set up in a data transmitting device; and

attaching the useful data of the data packet to the isochronous data format header in the buffer memory; and

taking both the isochronous data format header and the useful data from said buffer memory for data transmission.

2. (Previously presented) (Currently Amended) The method according to Claim 1, in which the isochronous data format header contains a comparison value for data counting, in particular data block counting, further comprising the steps of:

updating the comparison value for data counting in the isochronous data format header, which is entered in the special register, when the data of said data packet are written to the buffer memory; and

copying the updated isochronous data format header to the buffer memory at the a next free location for a data packet, after the completion of said data packet in the buffer memory.

3. (Previously presented) (Currently Amended) The method according to Claim 2, comprising the further step of performing data block counting in units of data blocks,

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wherein the comparison value for counting data in the isochronous data format header relates to the first data block in the data packet.

- 4. (Previously presented) (Currently Amended) The method according to Claim 1, comprising the step of selecting the a same number of data blocks per data packet.
- 5. (Previously presented) (Currently Amended) The method according to Claim 1, further comprising the step of dividing the data to be transmitted into data source packets, wherein, in particular for the <u>a</u> transmission of MPEG2 video data, a data source packet is composed from 8 data blocks.
- 6. (Previously presented) (Currently Amended) The An apparatus for carrying out the method according to Claim 1, having comprising a buffer memory for data packets, having a special register for the isochronous data format header of one of said data packets, and having initialization means, which copy the isochronous data format header for a first data packet of the isochronous data transmission to the special register for the isochronous data format header and the buffer memory and transmission means for reading both the isochronous data format and useful data from said buffer memory for data transmission.
- 7. (Previously presented) (Currently Amended) The apparatus according to Claim 6, in which the isochronous data format header for the first data packet is prescribed for the initialization means by an application process.
- 8. (Previously presented) (Currently Amended) The apparatus according to Claim 6, which furthermore has a data block counter, by which the data blocks of the isochronous data transmission are counted, and in which a memory management unit is provided, which transfers the a counter reading of the data block counter after the counting of the data blocks of said one of said data packets to the isochronous data format header stored in the special register, and copies the isochronous data format

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header that has been updated in this way in the special register to the buffer memory at the beginning of the next free location for said one of said data packets.

9. (Currently Amended) A method for assembling data packets for data transmission via a data bus, the method comprising:

writing a data header to a special register and to a selected portion of a buffer memory for said data packets; and

appending useful data in the <u>a</u> form of data blocks to said data header located in said buffer memory-; and

taking both the data header and the useful data from said buffer memory for data transmission.

- 10 (Previously Presented) The method according to Claim 9, wherein said data packets are isochronous data packets.
- 11. (Previously Presented) The method according to Claim 9, wherein said data bus is an isochronous data bus.
- 12. (Previously Presented) The method according to Claim 9, wherein said data header further comprises a comparison value for counting data blocks.
- 13. (Previously Presented) The method according to Claim 12, further comprising: updating said comparison value in said data header in said special register when said useful data in data blocks are written to said buffer memory; and

copying said updated data header to said buffer memory at a next free location for a data packet in said buffer memory.

14. (Previously Presented) The method according to Claim 13, wherein said comparison value is a number of data blocks, and further wherein said comparison value relates to the first data block in said data packet.

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15. (Currently Amended) The method according to Claim 9, further comprising

selecting the a same number of data blocks per data packet.

16. (Previously Presented) The method according to Claim 9, further comprising

dividing said useful data to be transmitted into data source packets.

17. (Previously Presented) The method according to Claim 16, wherein a data

source packet MPEG2 video data comprises 8 data blocks.

18. (Currently Amended) An apparatus for assembling data packets for data

transmission via a data bus, comprising:

a buffer memory for the assembly of data packets;

a special register for storing a data header of a first one of said data packets; and

an initialization means for copying said data header for said first data packet to

said special register and to said buffer memory-; and

transmission means for reading both the data header and useful data from said

buffer memory for data transmission.

19. (Previously Presented) The apparatus according to Claim 18, wherein said data

header for said first data packet is prescribed by an application process.

20. (Previously Presented) The apparatus according to Claim 18, further comprising

a data block counter, by which data blocks of said data packet are counted, and wherein

said data block counter transfers a count in said data block counter to said data header

stored in said special register, and further wherein said count in said special register is

copied to said buffer memory at a next free location.

21. (Previously Presented) The apparatus according to Claim 18, wherein said data

packets are isochronous data packets.

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22. (Previously Presented) The method according to Claim 18, wherein said data bus in an isochronous data bus.

23. (Previously Presented) The method according to Claim 18, wherein said data header further comprises a comparison value for counting data blocks.

24. (New) A method for assembling data packets for isochronous data transmission via a data bus, a data format for the isochronous data transmission being defined in an isochronous data format header of a bus packet, comprising the steps of:

writing the isochronous data format header to a special register and to a buffer memory for the data packets when the isochronous data transmission is set up in a data transmitting device; and

attaching useful data of the data packet to the isochronous data format header in the buffer memory, wherein said isochronous data format header includes a comparison value generated by a data block counter for data block counting.

25. (New) An apparatus for assembling data packets for isochronous data transmission via a data bus, comprising:

a buffer memory for data packets;

a special register for the isochronous data format header of one of said data packets;

initialization means, which copy the isochronous data format header for a first data packet of the isochronous data transmission to the special register for the isochronous data format header and the buffer memory; and

a data block counter, by which the data blocks of the isochronous data transmission are counted, and in which a memory management unit is provided, which transfers a counter reading of the data block counter after the counting of the data blocks of said one of said data packets to the isochronous data format header stored in the special register, and copies the isochronous data format header that has been

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updated in this way in the special register to the buffer memory at the beginning of the next free location for said one of said data packets.

26. (New) A method for assembling data packets for data transmission via a data bus, the method comprising:

writing a data header to a special register and to a selected portion of a buffer memory for said data packets, wherein said data header further comprises a comparison value for counting data blocks and further wherein said comparison value is a number of data blocks, and further wherein said comparison value relates to the first data block in said data packet; and

appending useful data in a form of data blocks to said data header located in said buffer memory.

27 (New) An apparatus for assembling data packets for data transmission via a data bus, comprising:

a buffer memory for the assembly of data packets;

a special register for storing a data header of a first one of said data packets;

an initialization means for copying said data header for said first data packet to said special register and to said buffer memory; and

a data block counter, by which data blocks of said data packet are counted, and wherein said data block counter transfers a count in said data block counter to said data header stored in said special register, and further wherein said count in said special register is copied to said buffer memory at a next free location.